

What is claimed is:

1. A method of grouping parts in inventory, comprising:
defining a database for indicating functional relationships between
a plurality of parts; and
5 searching the database to identify one or more groups of
functionally interchangeable parts.
2. The method of claim 1, wherein the step of searching includes:
repeatedly searching the database to produce a list of parts that
10 can be used interchangeably.
3. A method of generating a list of interchangeable parts, comprising:
defining a first table identifying a plurality of parts;
defining a second table, associated with the first table, indicating
15 functional relationships between the parts; and
recursively searching the first and second tables to generate the list
of interchangeable parts.
4. The method of claim 3, further comprising:
20 receiving a part identifier.
5. The method of claim 4, wherein the step of recursively searching
includes:
applying the part identifier to the first table to retrieve a functional
25 relationship from the second table, the functional relationship specifying an
additional part identifier; and
applying the additional part identifier to the first table to retrieve an
additional functional relationship from the second table.

6. A parts inventory system, comprising:
a database for indicating functional relationships between a
plurality of parts; and
a search engine for searching the database to identify one or more
5 groups of functionally interchangeable parts.

7. The parts inventory system of claim 6, wherein the database
includes:
a first table identifying the parts; and
10 a second table, associated with the first table, indicating the
functional relationships between the parts.

8. The parts inventory system of claim 7, wherein the search engine
recursively searches the first and second tables to generate the list of
15 interchangeable parts.

9. The parts inventory system of claim 7, wherein the search engine
includes:
means for applying a part identifier to the first table to retrieve a
20 functional relationship from the second table, the functional relationship
specifying an additional part identifier; and
means for applying the additional part identifier to the first table to
retrieve an additional functional relationship from the second table.

10. The parts inventory system of claim 6, further comprising:
an input interface for receiving a part identifier.

5 11. The parts inventory system of claim 6, further comprising:
a network interface permitting remote users to generate a list of
interchangeable parts.

10 12. The parts inventory system of claim 6, further comprising:
a remote workstation for communicating with the search engine
over a communication network.

15 13. A computer program product in a computer-usable medium,
comprising:
means for defining a database for indicating functional
relationships between a plurality of parts; and
means for searching the database to identify one or more groups of
functionally interchangeable parts.

20 14. The computer program product of claim 13, wherein the searching
means includes:
means for repeatedly searching the database to produce a list of
parts that can be used interchangeably.

15. The computer program product of claim 13, comprising:
means for defining a first table identifying the parts;
means for defining a second table, associated with the first table,
5 indicating the functional relationships between the parts; and
means for recursively searching the first and second tables to
generate a list of the interchangeable parts.

- 10 16. The computer program product of claim 15, further comprising:
mean for applying a part identifier to the first table to retrieve a
functional relationship from the second table, the functional relationship
specifying an additional part identifier; and
means for applying the additional part identifier to the first table to
retrieve an additional functional relationship from the second table.